

# THE COSMIC DAWN CENTER

# NEWSLETTER

Date: November 2019

## ORIGIN OF THE ELEMENTS

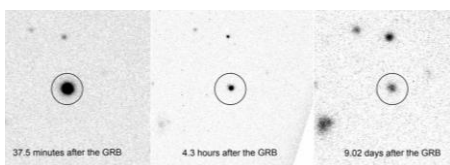
The first unequivocal evidence of where the heaviest elements were forged has now been found by a research group led by the University of Copenhagen. For the first time, an element heavier than iron has been clearly detected in the collision of two neutron stars, resolving one of the fundamental questions about the history of the Universe.



The research team led by Darach Watson of DAWN has identified the metal strontium in a spectrum from a neutron star collision observed in 2017. You can read more about it [here](#) and find the Nature publication following this [link](#).

## THE DEATH OF A STAR

Researchers at NBI and DTU Space have determined the emission of extremely energetic light particles during the violent death of a star for the first time. Read more [here](#).



The study is now published in [Nature](#).

## Summer Events 2020

The highlight of the events for the summer of 2020 is the Cosmic DAWN Opening Conference, to be hosted in Copenhagen on June 29 and 30. The aim of this event is to celebrate the opening of our Center and mark one year of successful operations.

We have already sent invitations to external speakers. We are really excited about this and obviously it is also critical that all our associates are present in this two day conference and the following 3 day DAWN summit. The summit will take place on July 1<sup>st</sup> to the 3<sup>rd</sup>. For now please save the dates and we will come back with more information soon.

## COMPACT OBJECTS

Compact objects FOR ALL: a two-day mini-workshop that will be held in Lund on February 10-11, 2020. Following on from earlier “for all” meetings in Lund, the idea is to have the broader astronomical community learn more about the topic of compact objects. These include black holes on all mass scales, white dwarfs and neutron stars.

For information about the meeting, including how to register, please follow this [link](#). The registration deadline is December 6, 2019.

## VISITORS

**Gael Noirot**, from Saint Mary’s University, visited DAWN from November 4 until the 22. He has been working on projects related to the JWST GTO program “CANUCS”, whom both Gael and Gabe Brammer are part of. He also gave a Cake Talk on November 21 on “Distant galaxy clusters revealed by Spitzer and HST and what we know from them”.

**Pratika Dayal**, from Kapteyn Institute, will be joining us on November 27-30 and giving the Cake Talk “Early galaxy formation and its large-scale effects”.

**Johannes Staguhn**, from John Hopkins University & NASA/Goddard Space Flight Center, will visit DAWN on December 18 and 19. He will give a Colloquium Talk to DAWN members about GLT collaborations.

## FIRST AID COURSE

On December 5, from 12:30 until 16:30, we will have a First Aid Course with Falck at Vibenshuset.

Falck recommends that we show up in practical clothes, since there will typically practical exercises, and some of them can be done outdoors. You can download Falck’s digital [First Aid book](#) before the course, as a preview of what to expect on it.

# EMPLOYEE NEWS

## JULEFROKOST

This year's Julefrokost will be held at Munkekælderen (Nørregade 10, København) on Friday December 13, from 5 pm. The schedule of activities is the following:

16.30 – General call for those traveling by bus to Nørreport

17.00 – Cocktail reception

18.00 – A Traditional Christmas Lunch

20.00 – Fun quiz

20.30 – Pakkeleg (gift-swap game)\*

21.00 – Dancing, games, and partying until late.

\*If you wish to participate in the Pakkeleg, please bring a small (<20 dkk) gift.

## NEW MEMBERS

On November 1<sup>st</sup> we welcomed our new secretary, Dorte Garde Nielsen.

This month we also welcomed Sinclair Manning, a PhD student from UT Austin, who will be with us for the next 5 months. She gave a Cake Talk "Characterizing Dusty Star-Forming Galaxies in the Early Universe" on November 14.



On December 2<sup>nd</sup> we will have a welcome lunch for our newest addition to the team: postdoc researcher Seiji Fujimoto.

## SCIENCE SLAM AT THE PLANETARIUM

On Friday November 1<sup>st</sup>, the Tycho Brahe Planetarium in Copenhagen celebrated its 30<sup>th</sup> anniversary by having eight researchers – from PhD students to professors – battle each other in a science slam contest.

Each scientist had to disseminate their research in an entertaining way in seven minutes, after which the MC – the famous Danish rapper Per Vers - promptly summarized the talk in a one-minute freestyle rap.

DAWN had two contestants – Thomas Greve and Peter Laursen – who unfortunately had to see themselves beaten by Martin Bødker Enghoff from DTU Space. You can find more information about the event [here](#).

## HOW TO BUILD A GALAXY

On Friday November 22<sup>nd</sup>, Peter Laursen gave a talk for a high school class at Vibenshuset. The seminar was titled "How to build a galaxy". Peter focused on the following questions: How are galaxies formed? What are they made of? How many are there and why do we care?



## KU PROFESSOR INAUGURATION LECTURE



### Pieces to the puzzle of galaxy formation

Johan Peter Uldall Fynbo

*The Cosmic Dawn Center*

4 December 2019

15.00 – 17.00

H.C. Ørsted Institute, Auditorium 6